

Examiner stated that Figure 1 was objected to for including a reference sign "18" not mentioned in the description. Applicants respectfully submit that no reference sign "18" was found in Figure 1. However, Applicants discovered that reference sign "118" was inadvertently not mentioned in the description. Figure 1 has been amended to delete "118". Thus, Applicants respectfully submit that Figure 1 as amended is now in compliance with 37 CFR 1.84(p)(5) and withdrawal of the objection is respectfully solicited.

Claims Define Allowable Subject Matter over the Applied References

The rejection of claims 1-4, 6, 8-12 and 14-17 over the Wong reference is respectfully traversed in view of the amendments to independent claims 1 and 11. Claims 1 and 11 have been amended to recite that the plurality of conductors making up the RF coil assembly have a width selected to minimize the conductor inductance. Support for the amendments can be found in the specification at, for example, paragraphs 17 through 20. "Anticipation requires the disclosure in a single prior art reference of each element of the claim under construction." W.L. Gore & Associates v. Garlock, Inc. 220 USPQ 303, 313 (Fed. Cir. 1983). The Wong reference does not disclose each element of the present invention as claimed in independent claims 1 and 11. Specifically, the Wong reference does not show or suggest Applicants' conductors of selectable width for minimizing conductor inductance. The Wong reference merely discloses a birdcage coil configuration and nowhere does the Wong reference disclose that it can resonate at substantially high frequencies and further it does not disclose a plurality of conductors having a width to minimize conductor inductance. Therefore, the present invention, as claimed in amended claims 1 and 11 is not anticipated by the Wong reference. Claims 2-4, 6, 8-10, 12 and 14-17 depend directly or indirectly from claims 1 and 11 and are thus similarly allowable. Applicants respectfully request withdrawal of the rejection under 35 USC 102(e).

The rejection of claims 5, 7 and 13 under 35 USC 103(a) is respectfully traversed. With respect to claim 7, Applicants respectfully submit that the Wong reference does not disclose, suggest or teach the RF coil assembly having a plurality of conductors of a width selected to minimize conductor inductance as recited in independent claim 1, from which claim 7 depends. For reasons stated with reference to the rejection under 35 USC 102, Applicants submit claim 1

for desired current density
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is patentable over the Wong reference and claim 7 is similarly allowable by dependency. Withdrawal of the rejection of claim 7 under 35 USC 103(a) is respectfully solicited.

The Bushong reference does not overcome the deficiencies of the Wong reference. Nowhere does the Bushong reference show, disclose or teach a RF coil assembly having conductors of selected width to minimize conductor inductance as claimed in the present invention. Thus, no reasonable combination of the Wong and Bushong references would obtain Applicants' recited invention of claims 5 and 13. Withdrawal of the rejection of claims 5 and 13 under 35 USC 103(a) is respectfully solicited.

In view of the foregoing amendment and for the reasons set out above, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Should the Examiner believe that anything further is needed to place the application in condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,



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Attachments: CLAIMS

ATTACHMENT - CLAIMS AS SUBMITTED 9/11/02

1. (Amended) A radio frequency (RF) coil assembly for a very high field Magnetic Resonance Imaging (MRI) system comprising:

a plurality of conductors arranged cylindrically and disposed about a patient bore tube of the MRI system, said conductors having a width selected for said RF coil assembly to resonate at substantially high frequencies and to minimize conductor inductance; and,

a plurality of capacitive elements for electrically interconnecting said plurality of conductors at respective ends of said conductors.

11. (Amended) A very high field Magnetic Resonance Imaging (MRI) system comprising:

a radio frequency (RF) coil assembly adapted to resonate at substantially high frequencies, the RF coil assembly having a plurality of conductors of selected width to minimize inductance;

a RF coil shield assembly adapted to further reduce the inductance of the conductors contained within the RF coil assembly; and,

a RF drive cable assembly adapted to electrically connect to the RF coil assembly.